THE VETERINARY RECORD

A Weekly Journal for the Profession.

EDITED BY WILLIAM HUNTING, F.R.C.V.S.

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THE ANNUAL MEETING.

Our fiftieth annual meeting was not all that could be desired. The attendance was not larger than usual, and very little was said to show that the members appreciated the immense amount of work done by the Council during the past year. Possibly those present did not represent the profession and we incline to this supposition from the fact that the election to Council gave evidence of a wide-spread feeling of satisfaction, as shown by the re-election of all those gentlemen who had taken part in the reforms carried out by our representatives. There is a satisfaction in having work recognised by the thanks of those for whom it is done, but perhaps the workers have no right to expect any thanks. They should be content to feel that they have done their duty. They should remember that gratitude is mostly "a lively sense of favours to come" and be content with the saint-like feeling that virtue *is* its own reward. Whilst admitting all this we must confess to the human weakness of liking a little acknowledgement for any extra effort, and our symphathies are with the members of Council who feel some mild disappointment. In no year has more work been done by the Council, in no year have greater changes been effected. Not only has progress been made but the much more difficult task has been accomplished of undoing the evil of former days, and that in face of not a little factious opposition. The extra work deserved some acknowledgement, and the men who attended twenty council meetings and an even larger number of Committeee meetings have had the barest justice and absolutely no generosity. The profession with its charters, its act of Parliament and its unpaid Council has many priveleges—it has also its duties, and with a little more *esprit de corps* it might have its graces.

Next week we shall publish a report of the meeting.

ELECTION OF COUNCIL.

The result of the ballot is to return to the Council seven members who have assisted its deliberations before, and eight new men who are sufficiently well-known to warrant the highest expectations. Seven of those elected are not Fellows, and this fact well illustrates the value of the new charter and the feelings of the profession. The following are the names and numbers of votes obtained.

Walley	719
Mulvey	715
McFadyean	686
Williams	659
Wragg	627
Lawson	600
Elphick	586
Edgar	570
Faulkner	557
Oliphant	556
Kidd	532
Hunter	529
Thompson	513
Shave	503
Peele	389

Science is represented by five professors. The Army has one representative. The North sends nine and the South six. Neither Ireland nor the West of England send a member. Col. Oliphant is unfortunate, as although elected like the others for a term of four years he had the misfortune to be drawn to take the place of a member resigned whose term lapses next year. Colonel Oliphant will therefore have to retire next year. This is the second time after election he has had the ill-luck to be selected by the ballot to take the place of a retired member whose time had almost elapsed.

THE DINNER.

The annual dinner was held at the Holborn, the President Mr. Mulvey in the chair, and was fairly well attended. The chief guests were the Master of the Farriers Company, Professor Crookshank and Dr. Somerville, one of our new examiners. Between the toasts were interspersed songs which enlivened the proceedings and brought the day to a close in a most agreeable manner. The day of our annual reunion was altered from May to June by our new charter, to enable country practitioners more easily to leave home. It was said that May was a busy season and that June would find them less occupied. We believe this is correct but it has not yet achieved the end desired. Perhaps the change of date is not yet quite understood—certainly the country practitioners failed to take advantage of it in increased numbers.

CASES AND ARTICLES.

A COMMINUTED OS SUFFRAGINIS.

By H. C. Wilkie, F.R.C.V.S., F.Z.S.

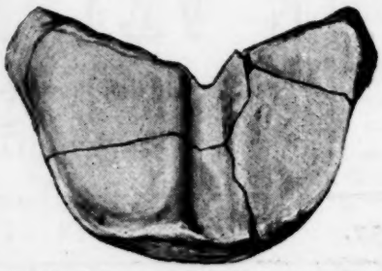
A few weeks since I was called to see a horse lying by the roadside and gathered the following history of the case.

On the previous day the horse attached to a cart was driven to market, a distance of somewhat over ten miles, with a load of pigs. When the market was over the horse was driven back towards home, and after having gone about five miles it fell suddenly lame, staggered a few yards, and finally fell in the roadway. The driver assisted by some passers by made every effort to induce the animal to rise, but finding all their exertions ineffectual dragged it to the roadside and left it for the night. Next morning I was sent for, and when I arrived on the spot found the horse lying on his near side eating some cut grass very contentedly. The animal was an old bay gelding (nearly thirty I should think) light in bone and in poor condition.

On examination I found a simple comminuted fracture of the near pastern bone with little or no swelling and scarcely any marked deformity, but the sole of the hoof was grazed as if from a recent tread on a large sharp stone. As the horse was so old and of little value I had him slaughtered at once, and secured the fractured bone which I found broken into twelve pieces. Being rather a good specimen I put the pieces together and made the two enclosed sketches to show the directions of the fracture.

Posterior view of the fractured os suffraginis.

The weather at the time was hot and dry and the roads very hard, but the driver of the horse was an old and steady man who would not be likely to require of the animal any unnecessarily rapid pace, otherwise I should have been inclined to suspect the fracture was due to concussion during extreme exertion. The bone itself shews no sign whatever of previous disease.



Upper articulatory surface of the os suffraginis.

Such cases are, I am aware, not by any means unknown to the profession, but I am inclined to think they are not very common, and in the absence of any known cause of violent concussion or disease are not easy to account for.

THE REGISTRATION OF SHOEING SMITHS.

By Geo. Edwd. King.

The editorial in last week's *Record* may be regarded as a skirmish in sophistical rhetoric. The questions I asked the editor have been carefully avoided, and his object apparently is to divert attention from the points raised in my communication to side issues. The editorial criticism is divided under three headings which I will endeavour to reply to seriatim.

1. My objection to the farrier's scheme is based upon my experience of shoeing smiths and their behaviour to us. It is within the knowledge of many that the farrier has been, and is frequently a poacher in treating foot and other cases and supplying medicines (I enclose a label which I captured only this morning and which perhaps you will kindly reprint for the information of your readers)* and in the knowledge of past experience there is reason to believe that this poaching will tend to increase with the possession of letters after

* HINDE'S
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Influenza, Sore Throats, Over Reaches, Wind Galls, Strangles, Weak Joints, Swellings, Inflammation, Weak Tendons, Lameness, Sprains, Sinew Strains, Rheumatism, Splints, and Curbs Forming.

PREPARED ONLY BY
J. HINDE, Farrier & Shoeing Smith,
SWAN INN, OLNEY.

his name and with the advantage of having attended lectures at the Royal Veterinary College and elsewhere. To the improvement of farriery in its legitimate province, *i.e.* the making and attaching of shoes to horses feet, no reasonable man has any objection, but any step beyond this is an encroachment upon our legitimate field of practice and is creating a body of foot specialists. It is the province of the veterinary surgeon to direct by his experience and advice the shoeing of the horse's foot in disease. I fail entirely to see how the veterinary profession will benefit by this scheme—except perhaps a few of our big men who may get some personal advertisement out of it—and I certainly think we should be first just to ourselves before we are generous to others. This may appear selfish, but it should be remembered that charity should always commence at home. It is all very well for those enjoying entrenched positions to sneer at "rivally" and "bogies," but the average practitioner is naturally jealous of any scheme which may result in the reducing of his income. In the ordinary routine of practice one of the greatest difficulties we have to contend with is the administration of empirical medicine before we are called in to a case, and one of the greatest offenders in this respect is the local farrier or shoeing smith. Our clients are not educated sufficiently or are not broad minded enough to discriminate, as the editor of *The Record* some time ago justly remarked, between *post hoc* and *propter hoc*.

I would ask whether it is not a fact that the whole scheme was accepted *en bloc* at one sitting of Council, without being carefully read through and considered, clause by clause, which the importance of such a document demanded?

What reason had the practitioner to assume that the scheme would not be carried out according to its printed clauses?

Did our representative body act carefully and deliberately, or precipitately embrace the opportunity of associating with two other bodies? and Did they secure a single safeguard in our own interests?

2. The editor admits that the scheme is *not* properly carried out, and claims to have raised his voice in protesting against *some* of the things done by the Registration Committee. He then goes on to say that we ought not to insist too loudly on this fault, because the practical application of the scheme has been left largely to the veterinary members of the Committee, and ends by asserting we cannot afford to cry "stinking fish" too loudly, etc This argument is so weak—except the piscine simile, which is strong—that it really is not worthy of the editor. It is too absurd to argue that because it is agreed that a thing is wrong, we shall injure our reputation by endeavouring to set it right, Now that it is acknowledged that we have what is elegantly described as "stinking fish" the longer and louder we cry for the removal of these delicacies, the sooner we shall have our waters clear and untroubled.

3. Appears to me a mere juggling with words, although I have carefully read this through and through I have altogether failed to understand what meaning this paragraph is intended to convey. Is it a conundrum? Surely it was a formal application that was read to the Council in the letter read at the quarterly meeting on the 21st of July last year.

No one thinks that the Registration Committee of the Farriers Company is under the control of our Council, *but the Registration Committee elected by our own Council is*, and these gentlemen cannot shirk the responsibility they have accepted. Then why I ask *again* has no report of their proceedings been forwarded to the Council?

I hope this question will be asked and *answered* at the Annual General Meeting. The editor of *The Record* concludes with an assurance of unflinching fidelity to the views he has advocated and expressed in the past, that they are the same yesterday, to-day and for ever. This announcement will be received with the greatest relief and satisfaction.

VETERINARY SOCIETIES.

NORTH OF ENGLAND VETERINARY MEDICAL ASSOCIATION.

The usual quarterly meeting of this Society took place at the Hotel Metropole, Newcastle-on-Tyne, on Friday, May 19th. The President, W. Hunter, Esq., in the chair. There were also present Messrs. C. S. Hunting, J. B. Nisbet, G. R. Dudgeon, D. Macgregor, A. Hunter, H. Hunter, F. Finney, Veterinary-Major Durrant, J. W. T. Moore, J. Gofton, Professor Wilson, W. V. Bainbridge, J. Fulton, J. Davidson, G. Davidson, J. Laidler, and the Secretary.

The minutes of the previous meeting were taken as read and adopted.

NEW MEMBERS.

Professor Wilson and Mr. J. Dotchin were unanimously elected members of the Association.

Mr. Daglish was nominated for membership by Mr. F. Finney.

THE ELECTION OF COUNCIL R.C.V.S.

The SECRETARY then explained what had taken place *re* the forthcoming election, and stated that Messrs. Elphick and H. Hunter had been selected by a general meeting of the members, and the Society had arranged with the Border Counties and South Durham and North Yorkshire Associations to issue a circular to the profession asking their support for Messrs. Awde, Thompson, Elphick and H. Hunter, who are the nominees of these Societies. This has been carried out by the Election Committee, and no doubt in the course of a few days the circular would be in the hands of members.

Mr. H. HUNTER then gave a short statement of his views generally on veterinary politics, and afterwards in the absence of Mr. Elphick brought forward that gentleman's motion "That a Committee be appointed by this Association to inquire into the working of the Veterinary Surgeons Act, so far as it relates to this district," and in doing so said that in his opinion it would be better for the committee to consider these cases and if necessary inform the Royal College than for a private practitioner, as there was sure to be a certain diffidence in bringing these things forward.

Messrs. NISBET and G. R. Dudgeon thought there was scarcely any necessity for bringing these things before a committee for there was not the slightest fear of the name of the informant being divulged by the College.

Mr. MACGREGOR thought it would be a good thing to appoint a committee, and mentioned a case that was within his knowledge, although he did not care to report it personally to the College Authorities.

Mr. MOORE mentioned a case that he brought before the notice of the Registration Committee, and he did not believe that the people who were offending ever heard that he had informed against them, and he therefore scarcely thought a committee necessary.

The PRESIDENT also thought it was just as easy for a member to report a case himself.

The following committee were ultimately chosen to do what was necessary: The President, Secretary, and Messrs. Finney, Nisbet, and Elphick.

Professor F. W. WILSON then delivered the following lecture, illustrated with oxy-hydrogen lantern views.

PALÆONTOLOGY OF THE HORSE.

By Professor F. W. WILSON.

Mr. President and Gentlemen, I thank you for the compliment paid me by being asked to give a lecture, considering that I have only been elected a member at this meeting. I have chosen a subject which I think has not been discussed at your previous meetings, and one of a scientific rather than of a practical nature.

The palæontology of the horse and other domesticated animals cannot fail to interest a profession so intimately associated with them. This branch of geology should be studied along with anatomy, because we can then account for vestiges and parts now seen in a rudimentary form, but which were at an early date an integral part of the animal's economy.

To the naturalist the horse is one of the most interesting animals now living upon the earth, because it is an excellent example for studying evolutionary changes which have taken place during its life history. It shows most clearly evolution of a higher form and usefulness from a lower and more unimportant animal as regards utility to man.

It would be impossible in this short lecture to enter upon the subject of evolution, but we certainly know that the animals now inhabiting the earth differ from, but were devised from pre-existing forms of animal life. Erasmus Darwin says:—"He concluded that the world itself might have been generated rather than created; that it might have been gradually produced from very small beginnings, increased by the activity of its inherent principles rather than by a sudden evolution of the whole by the Almighty fiat."

Palæontology throws great light upon evolution of species for we can study in the older rocks, the most simple forms of invertebrate animals, and then gradually find in strata of later formation vertebrate animals, until we arrive at the differentiated mammals seen at the present day. Charles Darwin in his *Origin of the Species* sets forth that the many forms of animal life now seen on the earth originated from a few original forms and that differences due to climate or accident cause an animal to be born differing from its parents. These by a struggle for life became adopted to different forms and those unable to hold their own perished, so we get what he termed "survival of the fittest." These forms of life have become embedded and preserved in the different strata which have been successively formed during the ages of the world. It is impossible for us to fix an age to these animals, for a geologist stated that a thousand years is but a geological moment.

A few remarks at this point upon the periods and formation of the earth's crust will enable you more easily to follow me in my later remarks. The formation of the earth is divided into four periods, commencing at the oldest they are primary, secondary, tertiary, quarternary. In the primary and secondary the most important rocks were formed, and in them we find in the secondary embedded fossils of fishes, aquatic animals, reptiles and birds and non-hoofed mammals as marsupials. At the later part of the secondary period the cretaceous formation occurred, and this is most important, for it marks the advent of animals of a higher type than those which lived in the earth previously. Flower says "We have, however, certain knowledge that when the land which formed the bottom of the cretaceous ocean, which flowed over a considerable part of the present continent of Europe and North America, was lifted above the level of the water and became fitted to be the abode of terrestrial animals, it was very soon the habitation of vast numbers of herbivorous and hoofed mammals.

The next age is called the tertiary and it is to this and the quarternary that I intend to confine myself to-night. The tertiary age is divided into three principal periods, eocene, miocene, and pliocene, the quarternary into pleistocene.

In the strata of the eocene formation an animal called the phenacodus has been discovered. The teeth of which are in number the same as most mammals. The incisors have cutting edges and are small in size. The head is small as compared with the rest of the body, and the cast or the interior of the brain case shows that the animal was of a low type. This is only what we should expect to find, for the further we go back in the history of an animal the less apparent do the evidences of his mental capabilities become. The cerebral hemispheres are very small compared with the cerebellum. We find the tail long and tapering, almost touching the ground, the scapula is rounded and similar in appearance to that of a carnivora. The clavicles are absent, the humerus perforated at the distal end, so that the coronoid and ofecranon fossæ communicate, as in the dog. The ulna is well developed; in the carpus each bone of the lower row stands directly beneath and articulates only with the one above. It has five digits, the third one is the longest and strongest. The terminal phalanges are flattened and were no doubt covered with hoofs. Each digit has a metacarpal and three phalanges except the first (pollex) this one only having two. The femur possesses the third trochanter found in all perissodactula. The animal did not walk on the whole of the foot like bears, nor upon the tips of the toes as the horse does now, but stood with the heels slightly raised from the ground. The animals found by Prof Cope varied in size from a bull dog to a sheep.

The next step brings us to a higher developed animal and a great advance in evolution over the phenacodus just mentioned.

In the lower eocene at Herne Bay Sir Richard Owen discovered a skull of an animal which he called the hydracotherium. This animal was about the size of a fox. A similar animal has been discovered in America by Marsh, and called by him the orohippus, but unfortunately it has been incompletely described. These forms show signs of a great advance in evolution on the phenacodus we have just seen. The bones of the second row in the carpus do not articulate alone with the bones of the first row; we also notice the carpus and tarsus are becoming stronger and the bones forming these joints shifting more to the inner side. The fore limbs possess only four digits and the hind three.

The change from the five digits to the four did not occur suddenly, for Marsh describes an intermediate form (Eohippus) which has a rudimentary first toe represented only by a metacarpal bone. In the hind limb of the Hydracotherium three digits are present. The first and fifth have disappeared, all the weight being borne by the 2, 3, 4. The teeth of this animal show the pattern of the arrangement of cusps and ridges which are more clearly made out in the later forms.

The next stage is the appearance of an animal discovered in the Paris Basin, the Palœotherium which has been described by the illustrious Cuvier. He, says Flower, demonstrated for the first time to the satisfaction of the scientific world that animals had inhabited the earth other than those now found upon its surface.

The Palæotherium.—This animal was discovered in the eocene formation, and has been described by Cuvier (the sketch, of this animal on the screen is copied from his drawing). You can see a striking resemblance to the tapir, the nasal bones being prolonged into a short proboscis. As regards the teeth the last molar has a third lobe, and the dental formula is—

$$I\,\frac{3}{3}\quad c\,\frac{1}{1}\quad p.m.\,\frac{3\text{-}4}{3\text{-}4}\quad m\,\frac{3}{3}\quad (x2).$$

Peculiar hocks, fetlocks etc. Notice the striking resemblance which this animal bears to the tapir of the present day. Flower says this animal is probably not in the direct line of ancestry of the order equidœ. Nooses at the distal extremity of the tibia proceed forwards and outwards as now seen in the horse. Calcis and astragulus about same shape but articular surfaces on calcis for astrag. are broader.

About the time of the appearance of the palœotherium the perissodactula were breaking up into different families perhaps, some were leaving the "swampy forests" and become horse-like, others remaining developing into tapirs and rhinoces, whilst the rest have either become very modified or become extinct. A few examples are still found in the Malay Peninsula and South America, but will soon be extinct. The three families formed at this period were the tapirs, rhinoceroses and horses.

The animals I have described lived at different periods of the eocene or first portion of the tertiary. We will now consider the fossil remains of a more recent epoch, —the miocene.

The Auchitherium.—During the miocene period an animal called the auchitherium flourished in America and Europe (Midhippus; Marsh). This animal was the size of a sheep. Its skeleton is very much like that of the horse of the present day, and in fact M. Christol states that a description of the bones of the horse would answer for that of the auchitherium. This is not so, for we find many structural differences in these two animals. For example the ulna is complete throughout and not a rudiment ossified to the radius as now seen in the horse. Also it has lost the fifth digit in the fore feet, and thus a stage advanced to the hydracotherium, and consequently there are three digits to each fore and hind foot. The third one is central, and is more developed than the 2nd and 4th which are placed beside it. The terminal phalanges of each of these digits are enclosed in hoofs, the two postero-lateral ones touch the ground, helping to support the weight of the body. The femur is similar to that of the horse, and shows the fossa above the external condyle. The fibula is separate and in the form of a flat bone extending from the tarsus up the leg bone.

The Hipparion.—This animal, about the size of small ponies, lived during the Pliocene period in Asia, Europe, and America. The skeleton in many respects is similar to that of the horse of the present day. The radius and ulna are distinctly separate bones. The fibula is united to the tibia. The fore and hind feet possess three digits; the third is elongated and larger, bearing all the weight, whereas the second and fourth are placed posterolaterally to the fetlock joint, they do not reach the ground, but are merely dew claws, although they contain the correct number of phalanges. We notice that the arrangement of curves and crescents on the tables of the grinding teeth is becoming more intricate. The ridges unite together to form a crescent, being surrounded by a plicated wall of enamel; the pillars are easily noticed. The anterior pillar is not connected with the crescent near it. There is a depression on the face in front of the lachrymal bone similar to the larmier of ruminants.

The Protohippus of Marsh resembles the hipparion. The Pliohippus of Marsh differs very slightly from the horse of the present day. When the pleistocene, or the period immediately preceding the present day, set in no horses were found showing these characteristics. Small metacarpals and metatarsals have diminished, the ergot being a remnant of the hoof or pad covering the distal end of these accessory digits.

So far, then, we have in the

Eocene	Phenacodus Hydracotherium	size of fox.
Miocene	Auchitherium	„ sheep.
Pliocene	Hipparion	„ pony.
Pleistocene	Equus	„ horse.

Equus.—Equidæ includes asses, zebras, quaggas. I will not enter into its minute anatomy because time will not allow, but a few of the most salient points which have reference to its past history will be interesting. The teeth have altered considerably during these epochs. If we take into consideration firstly the incisors or nippers we shall see that the primitive species possessed chisel-shaped teeth and on wear they showed the dentine surrounded by a ring of enamel. The next change was in the formation of a border which was notched but after time became continuous surrounding the pit or dental cup. We see that condition in the temporary incisors of colts. Comparing the incisors of the horse with those of the tapir and rhinoceros we find that those of the tapir show very little change from their primitive state, whereas those of the latter have decreased in size and number, and in some cases have entirely disappeared.

The canines were seen in both sexes among eocene and miocene ungulates, while at the present they occur in the males and sometimes in the female of the present day. They are no longer required as means of defence. The wolf's tooth, or extra molar is often seen in young horses.

The bar is increased in length since the phenacodus.

As regards the molars or grinders we find that they have become more and more complicated in the arrangement of the folds of enamel and cement on the tables of the tooth. In the phenacodus these changes are commencing, but are more marked in the hydracotherium. The crowns of the cheek teeth are higher than those of the hipparion and the anterior pillar is in connection with the adjacent inner crescent.

These changes in evolution of the molar teeth can be easily explained if we consider that the horse through these ages has been growing in size and importance, that now it may be compared to the engine and which for force expended fuel must be added. As more work is done, more food is required, and so evolution has worked to produce perfect grinders to masticate the food so that perfect digestion may take place. The molars wear unevenly.

There are some interesting structures seen now in the horse which in addition to bony evidences point to its ancestors being in possession of more digits than one. I will refer firstly to the suspensory or superior sesamoidean ligaments. This appears to casual observers to be composed entirely of fibrous tissue inserted to the sesamoids and lower row of knee bones, acting as a fibrous cord and support the fetlock. If it be carefully examined on its superficial surface, two small streaks of striated muscular tissue will be found, whereas on the deeper aspect two bands of muscular tissue extend throughout its course. These no doubt represent muscular fibres of flexor brevis which have been converted into fibrous tissue and consequently perform little or no function.

Another interesting structure is the ergot. This, as you are aware, is a horny piece of epidermis covered with a tuft of hairs and placed at the posterior aspect of the fetlock joint. Let us consider that the skin at the base of the fingers on the under surface of our hand becomes thickened and hardened according to the amount of manual work performed, and that the pads on the under surface of the dog's and cat's foot are very similar. The tapir, which is now a near relation of the horse, possesses a pad, and we can easily see that the ergot is the remains of a similar pad upon which it used to progress at an early age.

The callosities commonly called chestnuts seen on the fore and hind limbs of the horse are also patches of a warty character, seen above the knee in the fore limb and below the hock in the hind; asses and zebras only possessing the one of the fore limb, and these are of a comparatively small size. Of course anatomists try to associate these in the fore limb with the vestiges of the thumb or pollex, and in the hind with the great toe or hallux. But firstly the position of these, as you see in the fore limb, they are placed above the knee or wrist joint. Secondly—the first digit is the first to disappear in all animals. Thirdly—there is no bony structure underlying it to connect it with the bone, for on section we can only see the derma covered with horny epidermis.

Flower associates them with groups of peculiar glands seen on body and limbs of many ungulates.

The horse as we know it now has remained about the same since the end of the pliocene, for the hipparion disappeared at the end of the pliocene. But evolutionary changes are still going on, as we may see how by high feeding, careful selection of animals to breed from, several breeds are greatly improved, such as racehorses and carthorses.

I have been greatly indebted to the works of Marsh, Cuvier, Nicolson, Flower, Geikie, Darwin, Thompson, Owen and Huxley.

At the close of Professor Wilson's lecture a unanimous vote of thanks was accorded him on the motion of Mr. H. Hunter, seconded by Mr. Macgregor.

The models were found to be very interesting, and were closely inspected by all the members present.

W. Ashton Hancock, Hon. Sec.

THE CENTRAL VETERINARY MEDICAL SOCIETY.

The usual monthly meeting of this society was held on Thursday evening the 1st., in the room 19 at the Holborn Restaurant, instead of at the Royal College of Veterinary Surgeons, Red Lion Square. Mr. W. Roots, President, occupied the chair, and the other fellows present were:—Fellows:- W. F. Barrett, T. Burrell, R. Butler, T. C. Garry, A. E. Gostling, Wm. Hunting, J. S. Hurndall, F. W. Kendal, G. C. Lowe, Prof. Macqueen, Prof. Penberthy, Wm. Pritchard, A. Prudames, Captain Raymond, H. G. Rogers, W. Roots, J. Rowe, F. Samson, Prof. E. S. Shave, Wm. Willis, F. W. Wragg. Visitors: A. E. Clark, G. J. Conford, Morgan Evans, D. C. Houston, M. A. Hutchener, J. A. Lipscombe.

On the motion of Professor Penberthy, seconded by Mr. A. Prudames, the minutes of the preceding meeting were taken as read and were confirmed, being signed by the chairman as correct.

The Hon. Secretary (Mr. H. G. Rogers) stated that he had received a letter from Mr. Henry Edgar expressing regret that he was unable to be present that evening to hear Mr. Hurndall's paper.

Temporary change of Meeting Place.

The Hon. Secretary further announced that he had a letter from Mr. A. W. Hill, which explained why they then met at the Holborn Restaurant instead of at the Royal College as usual. Mr. Hill wrote from the College as under:—

May 25th, 1893.

Dear Sir,

"In answer to your post-card, dated the 17th inst., only just to hand, I regret that I am not in a position to say that our board room will be at your disposal on the 1st proximo, as the College is undergoing repairs and will hardly be in a fit state for your meeting. Therefore, I would advise you to hold it elsewhere for this time."—Yours truly,

A. W. Hill.

Mr. Hill's letter was, Mr. Rogers explained, received after that meeting had been advertised to take place in Red Lion Square, but in justice to himself he might state that last November he communicated in writing with Mr. Hill giving him the dates fixed for holding the meetings of the society in the ensuing session; and asking him to be good enough to let him know as early as possible whenever circumstances would prevent the society's meeting at the College.

Nominations.

The Chairman announced that he had received a nomination paper recommending Mr. Benjamin Freer, M.R.C.V.S. of Uppingham, Rutland, as a Fellow of that society, signed by J. Macqueen, E. S. Shave, and H. G. Rogers. Another nomination paper had been handed in recomending Mr. M. A. Hutchence, 128 Goswell Road, E.C., as a Fellow, and this was signed W. Pritchard and A. E. Gostling.

THE IMPORTANCE AND VALUE OF SYMPTOMATOLOGY IN DAILY PRACTICE.

By J. Sutcliffe Hurndall, M.R.C.V.S.

Mr. President and gentlemen, when our esteemed secretary honoured me with a complimentary request to prepare and read a paper before this society, I must confess to having experienced feelings akin to a very decided diffidence to undertake so responsible a duty, and upon reflection I feel that I shall not be chargeable with false modesty in making such an admission, when it is borne in mind that the Central Veterinary Medical Society includes in its Fellowship, and very regular attendance, a number of gentlemen who by reason of their general learning and their powers in debate have helped to raise this society to the highest pinnacle of fame among similar institutions in Great Britain; it would be invidious to mention names, but we have only to cast the mental eye down the roll of names of those who not only pay their annual subscription for Fellowship, but who more often than not grace these meetings with their presence, and we cannot but be impressed with the idea that he who ventures to furnish material for discussion at these monthly reunions, unless he is to appear ridiculous in the eyes of others, if not his own, must be prepared to select a useful subject, and moreover should be in a position to substantiate his views, for in all probability when the time for discussion arrives it may be subjected to the keenest criticism and for awhile he may have a rather rough time of it. There are, as you all know, a number of societies similar to our own in this country, which can furnish a membership roll including the names of those who rank very high in our profession, but if you were allowed a casual glimpse at their minute books, you would discover that these gentlemen of high estate in the profession are notable chiefly by their

absence from these meetings. Of course it is not their fault, because the greater number live at such a distance from the places of meeting of said societies that except under very exceptional circumstances it would be hardly reasonable to expect these gentlemen of the professional blue blood to attend. How differently we are situated with "The Central." It is the marvellous good fortune of this society to hold its meetings—and they are more frequent than those of any similar society—in a locality that suits the convenience of some of those who may be styled the creme de la crême of the veterinary profession judging them from the standpoint of scientific attainments; whose attendance is remarkable for its regularity. Any one who thinks he can bring a paper before this society without having it mercilessly thrashed out will, after making the attempt, discover his error—and that possibly at the cost of some personal pride. Bearing in mind then that I undertook the fulfilment of what I am told is one of the duties devolving upon me as a fellow of this society, in fear and trembling. The next difficulty I had to face, was to select a subject, and to discover this I began to ask myself the following question. What, from your own experience, is about the most difficult thing that members of the veterinary profession have to grapple with? I commenced to take in review the subjects upon which had been expended the largest share of attention on the part of the leading spirits of the profession; and after a very critical, at the same time I hope impartial, examination of the matter, so far as information could be obtained from professional journals, periodicals and literature generally, I came to the conclusion that for a number of years past, the best energies of the very *élite* of the veterinary profession on the continent, in England, and the United States of America have been devoted first to the elucidation of *pathology* and second to what for lack of a more comprehensive term I must apply the hackneyed, but very incorrect term, *preventive medicine*.

Now, while I have in all good faith looked up this subject, and satisfied myself from immediate personal examination of the veterinary and medical literature of the day, as to the direction into which the scientific savants of the last and present decades have devoted their energies, I do not wish you to arrive at the conclusion that I have made a recent discovery, or that when I tell you I think they might have made a much better use of their time I have formed the opinion a short time back. Not at all! My opinions hereupon may be said to date back to a period long antecedent to my entry into the veterinary profession. No doubt to some, such an assertion will sound awfully bold, and heterodox, still it is true—and I may add that the valuable knowledge I obtained through my studies when preparing for the several examinations to obtain a qualifying diploma, together with experience gained in daily practice ever since, have served to confirm me in this belief. But I have to bear in mind that I am addressing a body of gentlemen, who are in all probability able to judge better, and without doubt as well as I, who seem perfectly contented to take for granted what the big men of the profession tell them about the advantages—"the pre-eminent adavantages"—of a study of pathology, and the relation which the various known micro-organisms have to disease in its many sided phases, and I trust you will accept my assurance that I have no intention of giving offence when I state that the marvellous credulity of both the veterinary and the medical profession so far as regards these subjects is altogether beyond my feeble comprehension. I have no desire to make an attempt at turning to ridicule the laborious efforts of men of high scientific attainments. It would unquestionably be not only presumptuous, but an offensive mode of procedure on my part; at the same time I cannot but feel and express the most profound wonder that men capable of such earnest, hard work have not in greater numbers seen the futility of their efforts confined as they have been to these two branches of study and research. I do not wish you to understand that I undervalue the importance of the study of pathology and bacteriology. In conjunction with the study of therapeutics these two branches of scientific research are invaluable, but alone they are little better than valueless so far as the healing art is concerned.

Having assured myself as to the direction into which the men of light and leading in the veterinary and medical professions had for some time been devoting their energies, I began to ask myself, what has been the result of all this expenditure of time, money and life; I began to enquire whether there was any real practical outcome from it. Had any satisfactory discoveries been made to assist the hard working practitioner in curing cases as they came under his notice? Had any law been discovered to assist one in determining what was the condition of this or that patient when called in by a client; or to enable a veterinary surgeon to determine with precision and certainty what drugs to prescribe under given conditions? In short could it be said that after all the lavish expenditure of money and time, and the sacrificial offerings of frogs, rabbits, mice, dogs etc. etc. etc. innumerable any really substantial benefit accrued either to the human or lower order of animal kingdoms, with a view to the cure of disease. I have been able to discover none; on the contrary I find that gentlemen of note in the scientific world, such as Pasteur, Koch, Klein and many many others of more or less repute, who have at various times created tremendous sensations not only in the scientific world, but among laymen also, to wit the notable fiasco at the Mansion House under the then Lord Mayor of London, anent Pasteur's anti-rabic discovery. Under cover of the credit and repute of scientific discovery, there never was a greater fallacy attended as this was and is still with such fearfully serious results for the human subject. These gentlemen can none of them show that they have, by one iota, advanced the practical application of drugs to the cure or alleviation of disease; these are, I readily admit, very bold statements to make in face of the many remarkable and startling announcements that have from time to time been presented to the world, but although it is commonly affirmed that figures can be made to prove anything, there is no difficulty in furnishing statistics that will prove, up to the hilt, all that I have taken upon myself to aver. What is the chief function of the veterinary surgeon and the medical practitioner, that is to say in the opinion of the general public, and particularly that portion thereof which pays for professional advice? Is it not that some one who owns a horse or some other member of the lower order of animal creation that is suffering calls in a responsible member of our profession and commits the animal to his charge with a view to speedy restoration to health; again men and women present themselves before the medical man, a fee is paid, and a full explanation given as to sensations and symptoms subjective, and he or she goes away in the full hope that money has been paid for advice that is, as soon as may be, to result in restoration to health and strength. Is this not so?

You may tell your clients, and so may medical practitioners, that the best efforts of the cleverest men of the day have been directed to the consideration of the most intricate subjects connected with disease in order to determine its origin and special characteristics, and that it is hoped as a result of such investigation that means will be discovered how best to counteract the same; or you may endeavour to explain that such and such a micro-organism has been discovered, whereupon experiments have been made to determine whether or not some measures can be adopted in order to protect animals and persons from the invasion of such and such

disease, and with what reply are you likely to be met? Probably somewhat as follows: *Your experiments and your learned disquisitions on the origin and cause of disease are all very well, but can you cure my animal or can you restore me to health?*

I submit to you, gentlemen, that in far too many instances to be either pleasant or creditable to the learned professions of medicine, both veterinary and medical, the reply you would be obliged to make, if it is to be a conscientious reply, would be anything but satisfactory. I propose to read a few extracts, bearing upon this subject, culled from the opinions of leading men in both branches of the profession, and to commence with I will take an extract, presumably from the pen of our learned confrere Professor MacFadyean which appeared in *The Journal of Comparative Pathology and Therapeutics* for December, 1892, vol. v., part iv., "A marvellous addition to our knowledge of the pathology of many diseases has been made within the last twenty years, but it can hardly be said that equal progress has been made in the direction of therapeutics. To say this is in no way to reproach those who have specially devoted themselves to the discovery of new medicinal agents. It lies in the very nature of things, that it may be much more difficult to discover a remedy for a diseased condition than to discover the cause of it, although the discovery of the latter must in general be of great service in pointing the direction in which to look for a remedy. It is chiefly with regard to the important group of bacterial diseases that pathology has outstripped therapeutics. Since the cause and exact nature of many diseases of this class have been searched out, it has become evident that many of the agents formerly regarded as curative are valueless; and at the present time we are bound to confess that while we know a great deal more than was known twenty years ago about the means of prevention, there are many diseases for which no medicinal remedy is known." This is a delightfully positive statement from beginning to end, had the writer only possessed the modesty to add the following words, "*so far as I and those who belong to the same school of thought know*," it would have been a little more gracious on his part.

Again to take an illustration from the medicos, in *The Lancet* of the 14th November, 1885, is published an address delivered at Birmingham by Dr. Wilks then one of the consulting physicians to Guy's Hospital, on "The Treatment of Disease." In the course of the address Dr. Wilks says, "After considering these primary and important functions of the medical man, we eventually come to treatment by means of drugs and other agents. Now this method arose no doubt in superstition. If any part of the body was in pain it was to be relieved by rubbing or applying something to it, something especially which could be felt like heat or cold, and at the same time a liquid was put into the mouth. We see the process repeated every day in the streets; if a poor man falls in a fit or from faintness, he is pulled up on his legs, or set up, shaken, rubbed and various things, especially spirits, are forced between his lips. I feel some sympathy with these well wishers, for every one of us must constantly find himself in a similar position and rather sorry plight when called to a house to witness a patient die of apoplexy and the wife and daughters beseech us to do something to save his life. To get rid of their importunity and to occupy them we set them all to work to make mustard poultices and such trifles. Old books on medicine or herbals will show how every known plant was dragged into the service of the materia medica, and very often a very large number of them were combined together for medicinal use. There is no account ever given to show that their value depended on strict observation, but it is rather too evident that they were administered for the most fanciful reasons as the colour of the flower, the shape of the leaf or fruit. It required the era of Bacon to discard all these fancies and bring into force the method of observation and experiment. It would be interesting to know at the present time how many medicines are given from a knowledge of their use, and how many because we consider them likely to do good by simply following the dictates of our minds. I mean where for example, all of us, without exception, as far as I know, write down on a piece of paper measuring six inches by four, some drug for every trouble which the patient presents himself with, it would be rather difficult for us to give always a good reason for our action. I think it is not difficult to see that our art had not a scientific basis, but on the contrary was like all other arts of ancient times, formed out of the fancies of the human mind."

I could continue to quote from this address equally damnatary admissions of helpless incapacity, but the foregoing surely suffices, and time will not allow, but I ask did you ever hear of or read a more pitiable confession of absolute lack of ability to perform some of the simplest duties for which professional medical men are every day paid handsome fees than Dr. Wilks here acknowledges. I could quote from the opinions of such men as Dr. Bucknill, Dr. Whitle, of Belfast, Dr. Gairdeur, professor of the practice of medicines in the University of Glasgow, and others who have on occasions given vent to similar desponding views as to the utility of medicine, and who seem to hold the opinion that a knowledge of the action of drugs is "vague and imperfect." I have thus endeavoured to show you from the publicly avowed opinions of two of the most prominent professional men of the day, and, as I have already said, if time would allow I could find very much more of the same sort of material—that therapeutics or the healing art have not been advanced by the immense amount of work that has been envolved in the elucidation of pathology or the discoveries made in bacteriology, and I have no doubt that were you inclined individually to give your opinions on this subject, you would one and all—though probably with some reluctance—be compelled to admit the truth of my assertion.

I ask myself this question, viz. If all that has been done by some of the cleverest men of the day in the regions of investigation into pathology and bacteriology has not resulted in enabling me to solve the all important question how to prescribe for and cure disease with certainty, safety and celerity, is there any other course open to me? I satisfied myself that there is, and under the title of symptomatology, I propose to offer you a few thoughts, based not merely upon theory but upon really practical evidence; evidence obtained not simply in my own experience but in that of thousands of honest, earnest workers over a period of something like a century; workers as learned, as persevering, as industrious and as competent as the most eminent pathologists or bacteriologists of this or any other day. Now, in the first place, this study of symptomatology is suggested to enable you to prescribe with precision for patients which are the subjects of some disease. There is at least one gentleman in the room, probably more, that will not allow that medicine is an exact science; I don't agree with him. Given certain conditions, which I admit are very difficult to arrive at, in consequence of the variety of forms that the diseases assume in different subjects, which of course depend in no slight degree upon the peculiar idiosyncrasies of the individual subject; still, given those conditions, I am firmly convinced that in practice of medicine, we have at our disposal as exact a science as any you can name, physical, chemical, astronomical, or what not? I am convinced that the law laid down by Hahnemann, more than one hundred years ago, of which Hippocrates himself had a mental glimpse, is an absolute law in medicine. That such is the case I know full well

you decline to admit that. But you must pardon me when I assert that the doubts you entertain are due to the fact that you have only given a very superficial consideration to the subject; the difficulties which are obstacles to your acceptance of the law, so readily present themselves and probably appear to you so glaringly foolish that you deem the subject hardly worth a moment's thought; indeed the only wonder in your minds is that any man of ordinary common sense can be found, who after the barest examination of its merits, is willing to devote time and energy to the discussion of the principle. In addition, there is that exceedingly powerful and influential factor in the discussion of this subject, that it is unfashionable—unpopular with the leaders of the profession and the faculty for it to be known that even with the bare skirts of your garments you have touched the unclean, the unholy thing. Away with such weak and frivolous excuses! I say, you are professedly the healers of sick animals; do you intend to shut your eyes to truth because, forsooth, your teachers like the Levite of scriptural history pass by on the other side? I ask you to do as many have done already, make a study of the principle. Don't allow shallow objections, which, being the lightest, always come to the top first, cause you to close your eyes to the truth of a law which, I believe to be, like all laws of nature, a divinely inspired one. There are some fellows of this society who don't believe in Divine inspiration; but inasmuch as they are in a very decided minority I take leave, without wishing to offend their sensibilities, to assume that there is such a fact as Divine inspiration and to refer to its existence, because I am satisfied the majority of those who will listen to this paper believe in the existence of such a power. Whatever our faith may be on this part of the subject, whether we think the laws of nature are divinely ordained or not, there is the fact staring us in the face that in physics, chemistry, astromony, and other branches of science, these are fixed laws, and why not in medicine? Can any rational objection be advanced against the latter and if not why refrain from giving the matter a thorough sifting and examination? I may tell you that if you have the courage and the pluck to embark upon this sea of investigation, you must expect to encounter many a rough storm of doubt before you are likely to arrive at the haven of decision; but if you undertake the voyage of investigation with an honest determination to reach the port of truth, you will, notwithstanding the many points on the chart marked dangerous, ultimately reach a haven of therapeutic rest that will prove truly acceptable to you after the many tempest tossed experiences of doubt that you are now going through.

As the existence of this therapeutic law is closely allied with the subject of my paper, indeed I may say that for its realisation it depends upon a knowledge and very fine appreciation of symptomatology, it is desirable, before I attempt to elucidate and define the place of symptoms in relation to drug selection, that I should first examine the methods and principles upon which the dominant school of medicine relies in clinical practice. This is all the more necessary lost from what I have already stated I might be misunderstood in relation to my estimate of pathology. It might be thought that I attach no value to this science; such however is not the case, I consider pathology a very important subject to assist, mark you, not to rely upon entirely nor even mainly in selecting drugs for the cure of disease. I consider the dominant school in which I take the liberty to include most of those present here to-night, rely too exclusively upon pathology in the application of the science of therapeutics; and hence I have no hesitation in saying, arise the many disappointments in practice.

The prevailing method of treating disease by members of the dominant school of medicine "involves a theory of the cause and essential nature of the disease, and the resort to some expedient which would be likely to remove this supposed cause of the disease and to bring about a contrary state, and so conduce to health. (Dunham.) This is commonly described as the rational process. The other process which Hahnemann perceived to be comprised in the prevailing methods of treatment was—administering in the case of a very few diseases, of which fever from marsh miasma may be taken as the most illustrious example, certain remedies which had been discovered to possess, in some unexplained way, a power to cure these diseases. Such remedies had been discovered by the merest accident. No method was known by which others could be discovered; no method had been suggested by which it could be more clearly ascertained and defined for what particular varieties of the diseases in question the specifics, as they are called were especially appropriate." (Dunham). Now, I take it gentlemen, that you will all allow that according to the principles upon which you work your science of therapeutics is based "in its general principles and in its special applications upon the science and the facts of pathology."

Let us clearly understand each other as to what is meant by pathology; and we cannot do better than accept the definition of the word from so high an authority as Dr. Carpenter. By him it is declared "to be the science of the phenomena of disease or abnormal life:" you will perceive that this science must be kept quite distinct from pathological anatomy, which treats of modifications of substance or structure of various tissues and organs of the body which are due to the ravages of disease, but which can be studied either upon the living or dead body.

Now as pathology is the science whict treats of disordered functions in the living body, it becomes quite clear that a very large proportion of the opinions formed as to the causo and origin of disease must of necessity be of a speculative and thoretical character, nothing positively certain about them. How, then, can the science of pathology serve as a groundwork or basis upon which to establish a foundation for the practice of the science of therapeutics?

I would put it to you whether you have not found that "the attempts to bring pathological doctrines to bear upon the treatment of disease," have not more often than not resulted in failure and disappointment. I fully believe that pathology is capable of assisting us in forming a diagnosis, and not infrequently a prognosis, in cases of serious malady, and for these reasons only the science is unquestionably very valuable both to ourselves and our clients; but as a therapeutic guide, the experience of all time from Hippocrates onwards has proved teat it is but a broken reed to trust to in prescribing. Again, if there were no other guide than pathology to assist one in determining what drugs to prescribe in disease, it becomes absolutely necessary to wait for developments; indeed it is quite an every-day occurrence to hear of fashionable physicians and popular veterinary surgeons having informed their patients and clients that they required more time and better acquaintance with the case under consideration before they could speak with any degree of confidence as to the nature of the malady, and consequently defore they could prescribe to their own satisfaction; meanwhile the patient has to do the best he, she or it can. What is it that causes the patient to become aware that something is wrong, and either to speak of it or show it by signs of distress, something that is to lead up ultimately to a pathological development which is to enable the physician or veterinary surgeon to speak positively as to the nature and cause of the ailment? Why nothing more and nothing less than symptoms. Does it not strike you that if you have to wait for the mysterious developments of pathology in order that you may determine the exact

nature and the remote cause of disease before you can even commence to treat a case, that you are exposing your patient to considerable risk and danger? And does it not also strike you that, when all the marvellous provisions in other branches of science affecting the law and order of nature are taken into consideration and found to be so redundantly provided for, the very science of all others which is presumed to affect, if not control, the life of man and animals, each of which in its relative position is assumed to occupy the higher *rôle* in creation, should be consigned to the tender mercies of a science which under the most favourable conditions can only be relied upon as a highly speculative and theoretical one; determinable only when the speculations and theories of its devotees can be positively established and proved *post-mortem*?

Pathology, I am well aware, helps to determine abnormal conditions which can be recognised. With the slethoscope, the laryngoscope and such like instruments, and by the aid of chemistry a practitioner can form definite opinions upon the state of the secretions and excretion and similar abnormal conditions; but in each case these abnormal conditions are not the disease, but the result of disease; and I, for one, cannot accept a science which has to wait for such developments as these before it intimates to me what I am to do to cure my patients, as the science which is to be my therapeutic guide. Indeed if I had no better and more satisfactory basis of drug selection to rely upon than that furnished solely through pathology, I should consider it altogether unworthy the definition of a science.

I am not at all surprised when I hear my professional brethren say that medicine is not an exact science, when I find them relying upon pathology as their therapeutic guide; nor can it be wondered at that thoughtful practitioners should discover that hardly two of our numbers can be found to agree upon any given subject connected with practice either in pathology or therapeutics. Theories regarding the nature of morbid conditions are so varied and so frequently modified; at on time a special theory is all the rage, at another it is obsolete; how therefore can you with any show of reason expect to glean from such a science reliable suugestions for the cure of disease. The phenomena of disease which constitute the science of pathology are exceedingly inconstant, inasmuch as in different individuals or animals they are modified in type according to the peculiar constitutional and diathetic conditions of the patient, and although names are pathologically applied with a view to the classification of diseases, you must have all found in practice that such names are more or less imperfect in their exact application, and proportionately misleading when you come to determine the line of treatment to proceed upon. To illustrate my meaning still further allow me to remind you of that troublesome disorder known in common parlance as "parturient apoplexy;" how many theories have been advanced as to the pathology of this disease? I take it, that not one in this meeting could answer the query; personally, I would not undertake the task to calculate, but we shall all probably agree that they are very many; and after all that has been spoken and written upon the subject, is there any really practical outcome towards the solution of the all important question how to prescribe for the disease upon a pathological basis. Cures undoubtedly are made, and some practitioners are more successful—or lucky than others; but can anyone of these gentlemen assign a rational sequence on pathological grounds for the cure he claims to have made. I have no hesitation in openly affirming that not one of them can do so, simply because the pathology of the disease has never been settled, therefore they cannot claim these cures as a successful exhibition of their own method of treatment by means of pathology.

Again, take *Rheumatism*. We will admit for the sake of argument that the pathology of the disease is understood. Are the phenomena constant, and does the line of treatment adopted by the dominant school of medicine as suggested by an acquaintance with the pathology of the disease show satisfactory results? There is but one answer, a plain, unvarnished, No!

Once more consider what a variety of conditions are covered under the one term *Neuralgia*. In the nomenclature of pathology this term stands out alone, and if the pathological basis of drug selection be the true one then one line of treatment should succeed in every case. But does it? Is it not rather the exception than the rule to find the treatment of the dominant school effecting any good at all in that disease which vaguely signifies *nerve pain*? Almost every case has its peculiar features as regards both the character and the periodicity of the pain—to say nothing of the locality and the various causes, each of which depends in a very large degree upon the concomitant symptoms attending it, the remedy for which cannot rationally be determined on a pathological basis.

These illustrations furnish a description of not merely the difficulty, but the absolute impossibility of treating disease from an acquaintance with pathological phenomena alone; and the daily experience of the school which claims for itself the vaunted title of "rational" goes to prove in what an unsatisfactory condition the science which treats of the cure of disease really is. In the earlier portion of this paper I referred to the study of bacteriology as one of the sciences to which the dominant school has given special attention, but as the object of this study has been rather to prevent the dissemination and spread of disease than to cure it, I shall content myself by simply remarking, *en passant*, that so far as I have been able to glean from an examination into results, even less practical benefit to mankind and the animal world has accrued from the immense amount of intelligence and labour that has been devoted to its consideration than from the efforts at curing disease under the so-called rational system of medicine. In proof of this I have merely to refer you to Professor MacFadyean's experiments by inoculation for the prevention of black quarter; to a brochure, written by T. M. Dolan, Esq., M.D., anent "Pasteur and Rabies" wherein this gentleman proves conclusively that Pasteur has done very much more to spread rabies than either cure or prevent it. And similar proof of failure may be advanced against Professor Koch with regard to his anti-tubercular injections; for as was remarked by Dr. Dudgeon in his presidential address before the British Homœopathic Society in 1891, "It is now generally admitted that the whole business is a lamentable fiasco. That none have been cured, but many killed by it." Micro-organisms pathogenic and non-pathogenic have been discovered, *ad libitum*. To take a few of those which would naturally be considered not only the most serious, but if there is anything of a preventive character at all in inoculation the most useful, we may mention the bacillus of septicæmia, of typhoid fever, of choleraic diarrhœa, of glanders, of swine plague, of leprosy, of anthrax, and of tuberculosis, but after all the cultivations, inoculations and test experiments, can you point to one single practical outcome towards the certain prevention even, to say nothing about their cure of any one of the various forms of disease which I have enumerated. I have no manner of doubt that for every disease included in your pathological nomenclature there is some form of micro-organism peculiar thereto, but if you think that by isolating such organism and cultivating the same up to millionths and trillionths, you are going to obtain a preparation that by inoculating a healthy subject therewith you can prevent the development of disease, I believe you are encouraging yourselves in a lamentable fallacy, and I have the results in such experiments of

recent years to bear me out. If after all that has been done you can show no better results than those which are common public property, I respectfully submit that it is high time you directed your energies into other and more promising channels of labour and investigation. I could possibly anticipate some of the replies that may be offered to these rather sweeping charges against the pet science of the day, but I have little doubt but that the castigation I shall receive at your hands will be quite as much as I can stand against when it comes to my turn to reply.

I have endeavoured to give you some of the objections I have against the "governing law of empirical observation" which is your guide in therapeutics, it now becomes my duty to explain what principle I rely upon in place thereof, and how the same is applicable under the term symptomatology.

Now I know well that it is a very common thing for members of the "dominant" or "rational" school of medicine to decry symptomatology and to treat with but barely veiled contempt men who treat, as they style it, only the symptoms of a patient; indeed Dr. Murchison once so far forgot himself as to state in a lecture that "it requires no medical education to treat symptoms as the homœopathist does." To attempt to argue with anyone, much less a professionally trained man, who resorts to such statements as this under the belief that it is argument is very much like throwing pearls before swine; and I shall not so far waste either my time or your own by attempting to refute it, the task would be but child's play, but the game is not worth the candle. Now let us ask ourselves the question, what are symptoms? I reply that symptoms are the effect and manifestation of a diseased process evinced either subjectively or objectively, or more likely both conditions exist. It does not, however, follow that because symptoms are manifestly observable that they constitute disease. Nothing of the sort, they do not, but they enable the practitioner to recognise the existence of disease, and like finger posts on the main road they point out the way which will with the least loss of time enable the medical traveller to reach his bourn, in other words cure his patient; it has been tersely stated in the monthly *Homœopathic Review* "the physician deprived of his knowledge of symptoms would be like a sailor endeavouring to steer his ship through some intricate and unknown channel without his nautical charts. Symptoms then are indications which lead, by reflection on the ordinary course of physiological action in those parts of the body where they arise to a knowledge of disease. They tell us what organ is out of gear, and the manner as well as the degree in which it is so. They teach us the nature of the morbid process we have to remove, they constitute our guide to the measures necessary to its removal." But, say some of the objectors to symptomatology, "you find such-and-such a symptom, or perhaps symptoms, arising, and you at once fly to your materia medica to counteract the same." Nothing of the sort; those who are true symptomatologists, in other words those that are true followers of Hahnemann, do nothing of the kind. Selecting isolated symptoms and taking them up, one by one, as they present themselves from day to day during a course of illness, would expose anyone so acting to the charge of symptom treatment, and be worthy of all the cynical sarcasm which the vocabulary of such periodicals as *The Lancet* and *Medical Times* includes; and it is only a most lamentable ignorance on the part of those who pretend to argue on these lines against the selection of drugs according to the real principles of symptomatology that prompts such persons to advance these and similar objections thereto. No, the amyptomatologist proper, viz. the person who prescribes for a disease process according to Hahnemann's therapeutic law of drug selection, has to embrace in his catalogue of symptoms full particulars of two distinct classes, first, those which are capable of being artificially produced in the healthy body by drugs; and second those which present themselves in the course of disease, "called into being by some disregard of physiological laws." But before any use can be practically made of such information, it is necessary that not merely a few prominent symptoms should be noted and compared, but in each instance the totality of the symptoms, be the subjects such as aches and pains, or objective such as visible eruption, stethoscopic signs, or urinary analyses" must be taken together. "It is this totality which forms the guide of the 'symptomalolgist', not only in diagnosis and prognosis but also in treatment; it is this totality which tells of the presence of disease; it is the removal of this totality which assures us of the removal of disease;" and in this manner is disease treated by the light of symptom. There is a class of writers on medicine, and they may notably be discovered on the staffs of *The Lancet* and *The Medical Times*, who wilfully close their eyes to the fact that followers of Hahnemann prescribe, not according to individual symptoms as these two periodicals would wish you to believe, but according to the totality of the symptoms observable in any particular case; and more often than not, each case that comes under your notice provides two classes of symptoms, viz. first, those that are so plain that he who runs may read; and second, those that are unmistakeably present, but call for the experience of a professional diagnostician to discover. They are not palpable to the eye of the ignorant empiric, but to the more refined and intellectual prescriber, they are not merely manifestly clear, but they serve as land marks in the search for a remedy. No doubt in searching for all the symptoms, you may come across some that may appear trivial and unimportant; should you do so, I direct your attention specially to them; they appear trivial and unimportant because you do not as yet understand their import. To explain more fully what I mean by this I propose to quote a case given in *The Monthly Homœopathic Review;* as follows: "The value of apparently trivial symptoms we saw, very marked, in a case of extreme nausea and sickness incident to pregnancy, as it happened a first pregnancy—all the generic symptoms usually met with were present. There was not, however, so much actual vomiting as nausea, and disgust at food—but especially was there a dislike for bread The patient said she loathed it, and nothing could induce her to touch it. This symptom which would be ordinarily overlooked as a simple indication of indigestion, and one to be comprised with the heading of 'loss of appetite' meant more than this; what it meant we do not profess to understand, but it is one produced by *natrum muriaticum*, and as this drug also gives rise to the more prominent symptoms, the fact that it has this 'disgust at bread' in addition led to its selection. It was prescribed with but a faint hope of any good resulting, and with a fear that the nausea and sickness would endure for the usual time in spite of it or any other medicine. But it was not so. A few three drop doses of the third dilution were followed by a return of appetite, an entire loss of nausea, and a capacity to eat bread, neither have any of these symptoms returned during the four months which have elapsed since the prescription was written."

From this illustration I desire to point out to you how absolutely important it is to seek and find out every observable symptom and to reject not even the most trivial, for unless you have the whole before you it is impossible to complete the pathological picture, which to effect a successful cure must be reflected in a therapeutic mirror obtained from a similar picture drawn from the pathogenesis of some drug.

It has always been a matter of profound wonder with myself that the school of medicine which, as I think

somewhat boastfully, claims for itself the title of "*rational*," never discerned the reasonableness of the relation between the disease-producing powers of drugs, and the physiological abnormalities to which names are given in the nomenclature of pathology, with a view to determine the curative powers of drugs. The very fact that such relation exists, one would have thought would direct the attention of the logical mind to the possibility of there being some connection between drugs and disease which would enable the one to overcome the other, certainly in preference to the possibility of overcoming disease by some agent which, so far as one could learn from the most profound knowledge of pathology, had no more relation therapeutically with such disease than the most extreme of opposites you can picture to yourself, even though your imagination be never so vivid. But the consideration of this problem brings before my mental vision the fact that the so-called "*rational*" practitioners have never properly tested the pathogenetic action of drugs. They know a great deal about the physiological action of certain poisonous drugs and how they destroy life; but as to the powers of such drugs when given experimentally to the healthy subject, to produce symptoms simulating certain pathological conditions they knew absolutely nothing. These discoveries have been left to Hahnemann and his followers, and because Hahnemannians, or homœopathists if you prefer the term, have been the sole source of information on this subject the so-called "rational school has shut its eyes to this sort of investigation, and knows practically nothing about it; and upon the strength of its ignorance forsooth it ventures to ignore the value and importance of symptomatology, and charges homœopathists with merely attempting to treat symptoms. A more flagrant piece of impertinent [presumption I never came across. It is perhaps not to be wondered at that when the leaders of the profession and the medical journals denounce a system, the rank and file should not deem it worth the trouble of experimental research, but it is a fact well worthy of your serious consideration that there is not a single case on record where a physician who has honestly, and conscientiously undertaken the study and investigation of the system by a series of clinical experiments, has not been compelled to admit its truth, and who has not been converted to its practice. A goodly number of instances might be cited, with the names of the parties concerned, where the investigation was undertaken under the firm conviction that it was a very easy thing to pour contempt and ridicule upon homœopathy, but as the gentlemen referred to were really serious in what they undertook and honest withal, they were in the end not only compelled to admit that failure attended their efforts to show the system up as a fallacy, but so convinced were they of its truth that they could not do other than fall into the ranks of the despised homœopathists and boldly come out as followers of the learned Hahnemann. These are facts which, *The Lancet*, *The Medical Times* and such like journalistic ilk notwithstanding, ought to make any thoughtful man pause. Of course it is patent to anyone qualified to give an opinion on the subject that for the dominant school to admit Hahnemann's theory to be correct, means practically that it has for all ages been on the wrong track in treating disease, and no doubt this is making a very serious demand upon its moral courage; indeed everyday facts prove that this standard of moral excellence is far too high for the profession. A very casual glance at the works on materia medica published by Dr. Ringer and Dr. Lauder Brunton furnish abundant proof among the therapeutic hints therein that Hahnemann's system of drug selection has exercised a very potent influence on the minds of these gentlemen, who in their turn of course influence the profession at large, and I regret to say without that honourable acknowledgment of the source of their information which it is customary to expect of gentlemen. Plagiarism in the literary world is not as a rule looked upon very favourably, but Drs. Ringer and Brunton have been guilty of it with most unblushing effrontery.

In a paper on Symptomatology the late Thomas Hayle M.D., expressed himself as follows:— "Perhaps there is nothing more remarkable about the human organism in a healthy state than the absence of symptoms; and by this I mean the very little appeal it makes to the consciousness with which it is connected. It is an old saying that 'a healthy man shouldn't know that he has a stomach'; and it would be the perfection of an organism if the consciousness connected with it shouldn't know it had one, except through the senses by which it has in that organism a relation to the external world. To this perfection a perfectly healthy organised system very nearly attains." Then after describing his meaning by illustrations from the circulatory system, the complicated locomotive apparatus, and the processes, chemical and electric, which are continuously going on in a healthy body he adds "fearfully and wonderfully made truly! but more fearful and more wondrous still the insensibility and the unconsciousness that sit enthroned in the midst of so much movement and in the midst of so much feeling."

Now this is a very satisfactory basis for the symptomatologist to start upon; and whereas we know that every disease produces certain evidence of its presence through the media of symptoms, objective and subjective; and also that drugs given to the healthy subject are likewise competent to give rise to symptoms of a like character; and experiments without number have conclusively proved that the drugs which are capable of producing symptoms which in their totality represent pictures of some disease processes as they in turn are made manifest through the totality of symptoms, are as surely competent to effect a cure and restore the diseased organism to a normal condition. Therefore as a logical sequence those who are guided by symptoms in the selection of drugs for disease, argue that they rely upon a theory based on reason; and that whereas they are able to give a reason for the selection of certain drugs under certain circumstances and that such theory has been proved successful in practice, the rational school on the other hand which trusts to pathology alone for determining its selection of drugs in treatment cannot be said to have a guiding principle which all may follow. Then the symptomatologist claims to have proved the value and importance of this method of drug selection.

Although the pathologist will probably admit that he is guided to his conclusions by certain outward manifestations, which under some circumstances he allows himself to speak of as symptoms, he, in his endeavour to find out the cause and origin of disease, and give to every particular abnormal manifestation some definite name, overlooks a number of very important, though possibly minute, symptoms, and so treats every case or rather endeavours to treat every case generically instead of individualising with minuteness and exactitude.

Let me ask you; suppose any case submitted to ten allopathic practitioners who were each respectively in ignorance that the other nine had made an examination and prescribed therefor; do you think it probable, nay even possible, that any two of the ten would write the same prescription, and if not can it be said that there is any method or system in the practice of the dominant school? On the other hand place the same case before ten homœopathic practitioners, and it is very long odds in favour of the whole ten writing the same prescription —certainly so far as the selection of the drug is concerned. Now if this be so, it is very much like reducing medicine to an exact science, but even if they did not all agree, and the case were again gone into it would probably be found that the minority had failed to detect

one or more symptoms either through their own carelessness of observation or lack of ability to obtain necessary particulars from the patient.

Referring to an objection I once heard raised against symptom covering, as it was styled at that time, it was affirmed that a large number of drugs produced the same symptoms, providing, as the objector said, the statements given in the homœopathic materia medica were correct. Yes, it is quite true that you will find the same symptoms under a considerable number of drugs, but in the case of every drug you will find one or more symptoms peculiar to itself and that are not observable in any other drug. The gentleman who raised this objection no doubt thought he had made a great hit; the fact is he pointed out the weak point in his own armour and the strong one in mine; his objection only serves to make it more than ever clear that trusting to individual symptoms is a fallacy, and to emphasise the absolute importance of minuteness and exactitude in detecting every symptom both subjective and objective.

Having special regard to our veterinary patients, I am quite prepared to admit that we have a very serious difficulty to contend against in discerning the subjective symptoms, but as you all know, at all events all those of you who have had fairly extensive practice, there are methods and ways of speaking among animals other than by word of mouth. By their movements and actions much can be learned of what they feel or suffer subjectively; true they cannot tell you the character of a pain, whether it is burning or not, but there are always concomitant symptoms which may be observable objectively that will help to make up for this difficulty. Anyhow it seems to me that though there is this difficulty staring us in the face, it is far better to rely upon a system which has some decided method in its favour, than trusting to haphazard prescriptions. How many times did you older practitioners, when you first launched out in life, and how often do the young men of the present day find themselves entirely non-plussed, when called in to what appears to be a bad case, to give anything like a satisfactory explanation either to your client or yourself, as to what is really the matter with your patient. You note a number of prominent symptoms, and you say to yourself this is a case of so-and-so, and meanwhile you prescribe a something; not being satisfied with your diagnosis, on arriving home you pull down your Williams or your Robertson from the book shelves and refer to the disease you think you have to contend with. On reading carefully you find this and that symptom as you observed them in your patient, but lo and behold there are ever so many in the text books that your patient ought to have but has not, and you ask yourself the question is it this pathological development after all? Have you not found yourself in such a position many a time? If not you are more highly favoured than the majority of the dominant rational school.

Now, supposing you had been like myself a symtomatologist, what would you have done; instead of bothering your head to associate the case before you with some pathological definition to be found in Williams, or Robertson, or some other similar type of writer, you would have made a careful note of every observable symptom, never mind how apparently trivial, and if you had not got such a picture in your mind under the descriptive action of some particular drug you would refer to your materia medica and for certain find it under some drug. To illustrate my meaning, allow me to refer to a case I reported some time ago of a very occult character, I refer to the St. Bernard Dog that had two tumours in the abdomen, that was ultimately cured with a rather high attenuation of arsenic; the first sympton I observed in the dog was its restlessness and apparent anguish; next it was wasted to a skeleton; third, thirst, drinking little but often; fourth, adynamia, the dog was utterly prostrate and could not stand; fifth, the peculiar character of the cough. All these points were observed as well as many others, before the tumours were discovered, and after they were, I referred to the clinical reports and found that similar tumours had become absorbed under the influence of this drug; and that the whole of the symptoms referred to came under the pathogentic proving of arsenic. Hence I made my selection strictly in accordance with the totality of the symptoms, all of which were found under the heading of that one drug. Now before I found out those tumours were present, it would have been positively impossible to prescribe for him from a pathological standpoint, but all the other observable symptoms would have lead to the selection of arsenic, and even though I had never discovered the presence of the tumours the result would have been the same. In this case the pathological school, three of them indeed, had a try at curing the dog before myself but without success; they had observed the cough and gone for that alone, whereas the cough was merely a concomitant symptom. This is merely one case, but I consider it a very excellent one, of the advantages to be gained from the system of drug selection by symptoms, rather than trusting to your innate intuition to decide what are the pathological developments of the case and how to treat accordingly.

Oftentimes I doubt not, even now the best of you, after years of practice, have great difficulty in determining, right off, what name to give to disease, that is to say to your own personal satisfaction; and if you cannot answer that question honestly and clearly how can you prescribe. On the other hand, if you undertake a thorough searching study of the system, the claims of which I am now advocating, and make yourselves master thereof, you would not only have the satisfaction of knowing that you were doing your best like rational men, but also of seeing your cases recover much more rapidly and with less wear and tear to the animal system.

I do not wish you to conclude that the study of this system is an easy one; it is not! It involves an immense amount of intelligent hard work; and you will discover, should any of you make the attempt, that the more you learn, day by day, the more there is to learn. But it is an intensely interesting subject, and in addition to the requirement of very deep thought to master the details of its logic, you will find that a fertile memory is an unmistakeable requisite, otherwise very frequent reference to the materia medica is a *sine qua non*. I would suggest to those who contemplate giving support to the proposed Institute of Preventive Medicine, that the money it is suggested should be presented to that object would be much more advantageously and profitably expended in establishing an institute for experimental drug pathogenesis on animals of various kinds and classes. From such investigation much useful confirmatory information as to drug action could be obtained, as well as a knowledge of comparative drug pathogenesy.

I was intensely interested in reading an account of several cases of parturient eclampsia in cows as described by Mr. James Clark. F.R.C.V.S., of Coupar-Angus, in *The Journal of Comparative Pathology and Therapeutics* for March of this year; I have no hesitation in stating that judging by the symptoms recorded, Mr. Clark has been guilty of as nice a piece of homœopathy as one would wish to come across, and I congratulate him on the success of the treatment. Judging from the symptoms, belladonna is just what I should have prescribed myself, and my attention would certainly have been drawn to this remedy from the fact that the cases all presented "great excitement staring eyes, champing of jaws, frothing at the mouth, etc. There is also one very attractive and interesting feature in Mr. Clark's report; he had several cases and of those treated with *belladonna alone*, all recovered. One he

treated with belladonna, chloral and potass bromide which succumbed, and Mr. Clark regrets he did not bleed it. Better that he said he regretted mixing the drugs, and so counteracting the curative powers of the belladonna: there is one very important lesson to be learned from Mr. Clark's experience—that one drug at a time when properly selected is far more likely to produce satisfactory results than a mixture, concerning which you have no possible guide to inform you as to the probable result of its administration.

In the earlier portion of my paper I said that I should refer further on to those troublesome diseases known under the pathological terms, *Parturient Apoplexy* and *Rheumatism*; with respect to the former I reminded you of the many pathological theories advanced concerning it, and hence affirmed the difficulty which those of the dominant school experience in treating it. Now when you bear in mind how varied the symptoms are which present themselves in this disease, it is very easy to understand how difficult it must be to prescribe on pathological lines, even assuming for the nonce that the pathology was clearly understood; but on the other hand if you take a case and study carefully the whole of the symptoms, at one period having the delirium and at another the coma as leading indications, I think it would be found a very much more simple matter to prescribe successfully. At all events, although I have had a fair number of cases under my care during the past eleven years I have yet to lose my first case. Then in rheumatism, to show the value and importance of being guided in your treatment by symptomatology, how numerous are the forms in which rheumatism appears and how varied are the symptoms. But these variations are all to be accounted for under given drugs: for instance in aconite the experiments of the Vienna proving Society showed that this drug was capable of producing pains in the joints, muscles, and fibrous tissues distinctly similar to those of rheumatism; and also in addition to the foregoing, palpitation of the heart and præcordial anxiety; and *post-mortem* examination, after increasing doses to rabbits has given evidence of lesions of the mitral valve; also inflammation of the pleura and peritoneum have been observed. Again, as Dr. Hughes states in his able work, Bryonia is incomparably the best remedy after aconite for acute rheumatism. "In its whole pathogenetic action, it reminds one of the rheumatic poison. Its feeble affinity for skin and mucous membrane, and its powerful influence over serous and synovial membrane and muscular fibre, with its fever and sour sweats, point unmistakeably to this disease"; and one of its leading indications is that "the pain is increased by motion." On the other side of the question there is a remedy—Rhus Toxicodendron, which is adapted for that form of rheumatism where the symptoms "come on with severity during repose, and they increase as long as the patient remains quiet, until at length their severity compels him to move. Now on first attempting to move he finds himself very stiff, and the very first movement is exceedingly painful. But as he continues to move however, the stiffness is relieved and the pains decidedly decrease, the patient feeling much better."

Again another difference between these two remedies is that while bryonia is peculiar to rheumatism aggravated by dry, cold winds, that of rhus is intensified by wet weather. Such are a few of the indications by which symptomatologists are guided, bearing in mind all the same, that unless they also are accompanied by others in order to form a complete picture of the pathogenesis they would not be suitable; but in the majority of cases where these leading symptoms are present, it will be found that the concomitant ones are present also.

I cannot of course form an opinion as to whether I shall succeed in making any impression upon your minds as to the feasibility of the system I have endeavoured to bring before your notice, but already I have occupied too much time, and must content myself with thanking you very heartily for the patient hearing you have afforded me.

ARMY VETERINARY DEPARTMENT.

Vet.-Major W. Walker has been placed on temporary half-pay on account of ill-health. Dated 20th May, 1893.

Vet.-Lieut. L. J. Blenkinsop has been posted for duty to 10th Hussars, vice Vet.-Lieut. E. E. Martin transferred to Woolwich.

Vet.-Lieut. A. England embarked on 6th instant. for a tour of service in South Africa to relieve Vet.-Lieut. R. W. Raymond.

Vet.-Captain G. R. Griffiths, Principal Veterinary Officer, Egyptian Army. has been granted four months' leave to England.

Vet.-Capt. E. E. Bennett has been granted two months' leave from Egypt to England.

Vet.-Lieut. E. Taylor has been granted six months' leave to England from India.

Colonel J. D. Lambert, C.B., Director-General, Army Veterinary Department, was one of the guests at the dinner given by the Secretary of State for War in honour of Her Majesty's birthday.

Her Majesty has been pleased, on the occasion of the celebration of Her birthday, to appoint Vet.-Lieut.-Colonel James H. B. Hallen, Inspector General, Civil Veterinary Department, India, to be a Companion of the Most Eminent Order of the Indian Empire.

The Civil Veterinary Department.

Of the eighteen posts in the Civil Veterinary Department, sixteen have now been filled by probationers, who are waiting for the rules proposed by the Government of India to be returned by the Secretary of State. Of these sixteen posts, however, a few are only temporarily filled. Both vacancies are in the Punjab.

REVIEW.

Veterinary literature is indebted for a work on operative veterinary surgery to Professor Liautard, Principal of the American Veterinary College, and Editor of *The American Veterinary Review*.

The author, who is of French extraction, has availed himself very freely of the literature of his country, and with the results of his own experience has produced a book of high merit. If indeed there is anything to be complained of it would be that it is rather popular, that is to say general in style, differing in this respect from the works of German

writers which are usually painfully elaborated, but to the practitioner this is no detriment. The book is written in a direct and interesting manner, a great recommendation in a text book. it touches so many points which will be quite new to English readers, its illustrations are very numerous and in most cases good, and with one or two exceptions the author has acknowledged his indebtedness for assistance. Finally he seems to have done English inventors full justice.

The work commences with "Means of Restraint" and immediately one sees one of its good features. There are illustrated gags, twitches, muzzles, side bars and various styles of hobbles (the author prefers the English pattern). Then are given the most useful methods of casting and securing horses and cattle with ropes, hobbles, and the hippo-lasso. A very excellent cut is given of Winsat's trevice, which is apparently unknown in England, but which is so much appreciated at Alfort that the school authorities are having one erected in preference to the French form. By this the horse can not only be restrained in the standing position but can also be laid down with the greatest facility. The same chapter gives a description of Daviau's operating table, used at Alfort for all valuable horses, and another of American origin (Hodgson and Morgee) which seems of great simplicity. It seems rather curious that an accident should have happened to-day in the school showing the value of this table. A roan mare was cast on a thick straw bed (3½ feet deep nearly) to be fired for spavin. When the operation was over she could not rise and had to be destroyed. On this point, however, the work is not quite complete, as Daviau has just brought out a new table with the object of surmounting the difficulty in turning the horse over which was present in all the old forms. The chapter ends with a brief note of how to secure sheep, pigs, dogs and cats.

Local and general anæsthesia follow and illustrations are given, among others, of Carlisle's, Gresswell's and Cox's muzzles—the latter has, I fancy, previously appeared in the pages of the *The Record*. The next chapter deals with surgical diagnosis and aids thereto. Then comes surgical therapeutics, preparation of the wound, use of antiseptics and bandaging, this latter occupying 21 pages. Elementary operations are next considered, re-union and suturing. The more common sutures are figured and described but this subject is rather briefly dealt with.

The next chapter has reference to firing. and this has very full notice. The method of subcutaneous firing described has been used at the Berlin School in firing for spavin, and has been found to leave very slight traces of the operation whilst the effects are usually excellent. The use of tape and rowel setons follows, and the ablation of tumours ends the cnapter.

The treatment of fractures is pretty freely dealt with, and English readers will be surprised at the sanguine character of some of the operations suggested by Prof. Liautard. If I am not mistaken the illustration of a splint for fractures of the lower maxillary has also appeared previously in *The Record*. I am not sure if I am right in attributing its authorship to Mr. Roalfe Cox. Amputations, trephining, periostotomy and resection of bones conclude this chapter.

The next chapter continues with crural and caudal myotomy, tenotomy and operations on fibrous structures. Then comes a chapter on operations on the teeth, and here are noted a number of instruments the result of English ingenuity notably the inventions of the late Mr. Gowing. It seems, however, that one of the most useful instruments for the extraction of teeth is passed over. I refer to the excellent forceps of the late Prof. Robertson. These forceps are probably without a rival for simplicity, ease of application and thoroughly practical character. This chapter also includes operations on the tongue, œsophagus and stomach, and considers in a most excellent treatise of some 63 pages the question of herniæ and their reduction or cure. Chapter nine is devoted to operations on the respiratory apparatus. First comes hyovertebratomy or puncture of the guttural pouches, which for some unexplained reason is considered of great importance in France and forms one of the regular operations performed weekly in the practical surgical course.

Operations for roaring are limited to a description of Prof. Cadiot's method and of the exploded "operation of Fleming." So far as I have studied the subject no excisive operation is at all reliable or worthy of recommendation. Tracheotomy occupies some space, and we see here the tubes of Spooner and Gowing now almost unknown in England. Blood letting and the control of bleeding form chapter 10. Chapter 11 deals with neurotomy and its sequelæ. Chapter 12 with urethrotomy, lithotrity and amputation of the penis. Chapter 13 is excellent in its method of dealing with diseases of the foot, the diagrams are new, the descriptions clear, and the author has steered a judicious course between the excessive use of the knife so common here and the palliative and "*laisser aller*" treatment popnlar in England. A short chapter (which however is in advance of our present practice) disposes of operations on the eye and ear, and the book ends by considering diseases of the poll and withers.

It is throughout excellent. The writing is clear and to the point. The author has shunned useless verbiage and that pernicious habit of theorising about the unknown and uninvestigated which is the bane of veterinary science. A man meets with a difficulty and straightway sits down not to investigate and conquer it but to invent a theory about it. The spirit of the author on the other hand is thoroughly practical. He has read much, seen much, and thought much; and if the book occasionally reveals an abuse of the word "organ," an Americanism, or a printer's error we can well forgive it to a man who has made the great discovery of a point where reasoning from observation ends and frivolous theorising begins.

JNO. A. W. DOLLAR.

Alfort, June 3rd, 1893.

CORRESPONDENCE

RISKS AND REWARDS (A.V.D.) INDIA.

SIR,

Bearing upon this subject the remarks given under, are by Lord Roberts, and support your recent correspondent:—

Yours obediently,

YEOMANRY.

Of late years, although India itself has been growing rapidly in wealth and prosperity, all classes of Europeans in the employment of the Indian Government, except the non-commissioned officers and rank and file of the British Army, who are paid in sterling, have been serving under the extremely disheartening conditions of gradually decreasing pay and gradually increasing expenses. It is true that the nominal rates of pay are the same as before, but the cost of living is much higher than it was 20 years ago, and, owing to the depreciation of silver, the obligatory home charges, which most Europeans of any standing in India are called upon to meet, are pressing more heavily on them year by year. Not only so, but during the period of my Indian service, owing to financial exigencies, the number of the higher appointments open to military men have been much reduced. The result is that it is scarcely possible for any one to save money, and it is almost equally impossible for the junior officers to live on their pay, or, if married, to maintain their wives and families in comfort and respectability.

NATIONAL REGISTRATION OF SHOEING SMITHS.

SIR,

It appears to me somewhat strange that some of the members of the Farriers Company or of their Committee have not replied offering some explanation to the many criticisms which have appeared from time to time in your paper, upon the Registration Scheme.

The letter in your paper of last week signed M.R.C.V.S. is worthy of consideration. It is practical and to the point, and calls for a reply. Now that members of the veterinary profession are beginning to take up the question it behoves those who have the control and the carrying out of the scheme to offer some explanation.

In November, 1890, I expressed my views as to the connection of this scheme with horse-shoeing competitions, pointing out matters which I did not think consistent with practical working. It appears now that there is a new departure from the original programme in the shape of adding to the prize money at agricultural horse-shoeing competitions.

Again your correspondent estimates that something like £2000 has been received to carry on this scheme. This large sum of money has been subscribed by shoeing smiths and others for the purposes set out in the prospectus, and from what has been stated it appears that none of those promises contained in the prospectus have been carried out, except granting worthless certificates. I have upon a previous occasion referred to the question of funds, may I now say, as the committee issues an annual report upon the working of the scheme, why not at the same time issue an account of the receipts and expenditure so that members may have some idea of what has been done with their money.

You say, in your notes of the 13th, that the methods of the winners are copied at shoeing competitions. This is all very well for the purpose intended, but for practical purposes in my opinion it should not be encouraged; for in a very large majority of cases the prizes go to the men who can make the foot look the prettiest and, as you know, this cannot be done without a free use of knife and rasp. Adopt this into every practice, the evil consequences that would arise therefrom is well known to all practical men. Therefore if you register men who make the foot look smart and pretty, giving them at the same time to understand that such is to be carried out in their every day work, I hold you register men to cripple horses.

If I understand rightly it is only the prize winners who are registered. To register men who can satisfy the whims and fads of judges, and overlooking other men who are equally good and might be winners if other judges were appointed, is in my opinion very unfair.

It appears to me that the Farriers' Company have failed to carry out their scheme and now they ask agricultural societies to assist them. The scheme so far as it has gone proved utterly useless and, as your correspondent says, unsound to the core, and for all practical purposes seems to be drifting further still into shallow waters. What are the future intentions of the Farriers' Company, and how do they purpose to carry out what they have promised to the trade?

To assist in apprenticing, and to instruct, are the two most important principles embodied in the scheme, and so far these two promises remain to be fulfilled. Every effort should be made by the trade to see that this is carried out to the satisfaction of themselves and to the subscribers. Registration and examination are two insignificant items so far as the trade is concerned, as compared with the two former ones, and it requires but little ability to devise means to carry them out. I am therefore strongly of opinion that if this scheme is to be continued no further registration should take place until the two former principles are carried out in a good practical working form; for to carry out the latter before the former is simply putting the cart before the horse.

All I ask is to carry out what was specified in the prospectus when the scheme was inaugurated, and further as one of the craft, I strongly protest against one penny of the money that has been subscribed to this scheme going into the pockets of prize winners at shoeing competitions. If the promoters of the scheme have any money to spare I would respectfully urge upon them the desirability of making an effort to carry out that which they have promised. Failing to do this I would suggest that the best and wisest course would be to give the scheme up, and to hand over to some charitable institution what surplus money it might possess.

Yours truly,

Neath, May 30th. JOHN OWEN.

[Mr. Owen will be glad to know that in future all registered men will have to pass a practical examination—that the funds are not wasted, and that all judges are not incompetent.—ED.]

COMMUNICATIONS, BOOKS, AND PAPERS RECEIVED:—Messrs. J. Webb, J. E. Wallis, E. W. Hoare.

We shall be obliged by early intelligence of all matters worth bringing under the notice of the profession, and thankful to any friends who may send us cuttings from local papers, containing facts of interest.

Original articles and reports should be written on one side only of the paper, and authenticated by the names and addresses of the writers, not necessarily for publication.

Communications for the Editor to be addressed 20 Fulham Road, S.W.